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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,888	11/28/2001	Ralph P. Thompson	3192-001	1598

7590 06/28/2004
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EXAMINER

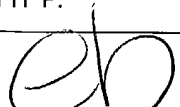
PHAM, MINH CHAU THI

ART UNIT PAPER NUMBER

1724

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,888	THOMPSON, RALPH P.	
	Examiner	Art Unit	
	Minh-Chau T. Pham	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/28/03, 1/10/03</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaffe (2,328,381).

Jaffe discloses a filter cartridge assembly comprising a tubular housing (12) and a plurality of filter media sections (36, 37, 38 and 39 in Fig. 2; page 1, left col. line 49 through right col. line 11; page 2, left col. lines 36-48) wherein the first filter media section has a length in a direction from the first end to the second end that includes at least portions of at least two of lengths of the inner wall sections such that the first media section traverses at least one of the shoulders, and the filter chambers in a gradual decreasing cross section from the top to the bottom (see Fig. 2). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a gradually decreasing tubular housing as taught by Jaffe since the gradually decreasing cross section of filter chambers would help increase the flow of fluid through the filter media by gravity force.

Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaffe (2,328,381), in view of Pyper (5,032,261).

Claims 11-30 call for the annual flow director extending radially inwardly from the inner wall of the tubular housing. Pyper discloses the annual flow director extending radially inwardly from the inner wall of the tubular housing (see 45 in Fig. 1; col. 6, lines 3-12). It would have been obvious to a person having ordinary skill in the art at the time

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the invention was made to provide annular flow director as taught by Pyper in the filtering apparatus of Jaffe since the flow director helps redirect the fluid inwardly so that it passes through the filter media and is sufficiently filtered before being exhausted (see col. 6, lines 3-12).

Response to Arguments

Applicant's arguments filed on May 3, 2004 have been fully considered but they are not persuasive.

Applicant argues that the cited reference "Taylor does not teach a housing having at least three sections wherein each section includes an average inner diameter that is smaller than its previous section" and "does not teach the annular flow director extending radially inwardly from the inner wall from the tubular housing". The Examiner now drops all the previous cited references and newly introduces Jaffe as the primary reference to show a filter cartridge assembly comprising a tubular housing (12) and a plurality of filter media sections (36, 37, 38 and 39 in Fig. 2; page 1, left col. line 49 through right col. line 11; page 2, left col. lines 36-48) wherein the first filter media section has a length in a direction from the first end to the second end that includes at least portions of at least two of lengths of the inner wall sections such that the first media section traverses at least one of the shoulders, and the filter chambers in a gradual decreasing cross section from the top to the bottom (see Fig. 2). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a gradually decreasing tubular housing as taught by Jaffe since the

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gradually decreasing cross section of filter chambers would help increase the flow of fluid through the filter media by gravity force, as claimed in claims 1-10.

The Examiner also introduces Pyper as the secondary reference in combination with the primary reference Jaffe to show the annual flow director extending radially inwardly from the inner wall of the tubular housing (see 45 in Fig. 1; col. 6, lines 3-12). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide annual flow director as taught by Pyper in the filtering apparatus of Jaffe since the flow director helps redirect the fluid inwardly so that it passes through the filter media and is sufficiently filtered before being exhausted (see col. 6, lines 3-12), as claimed in claims 11-30.

Applicant's arguments with respect to claims 1-30 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh-Chau Pham
Patent Examiner
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June 24, 2004